



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Department of Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0140830002-09

March 11, 2009

Scott Roberts
TM Crushing, LLC
P.O. Box 437
Lehi, UT 84043

Dear Mr. Roberts:

Re: Intent to Approve: Modifications to AO (DAQE-AN0140830001-08) to Replace a Generator and Add a Combination Crusher/Screen; Tooele County; CDS B; NSPS (Part 60)
Project Number: N014083-0002

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Enqiang He, who may be reached at (801) 536-4010.

Sincerely,

Ty L Howard, Manager
New Source Review Section

TLH:EH:sa

cc: Tooele County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modifications to AO
(DAQE-AN0140830001-08) to Replace a Generator
and Add a Combination Crusher/Screen**

**Prepared By: Enqiang He, Engineer
Phone: (801) 536-4010
Email: ehe@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0140830002-09

Date: March 11, 2009

Grantsville Sand & Gravel Pit

**Source Contact:
Mr. Scott Roberts
Phone: (801) 766-7611**

**Ty L Howard, Manager
New Source Review Section
Utah Division of Air Quality**

ABSTRACT

TM Crushing, LLC (TM Crushing) operates an aggregate pit, the Grantsville Pit, located five miles south of Grantsville in Tooele County. The location is an attainment area of the NAAQS for all pollutants. The company has requested a modification to replace the 350 kW diesel generator with a 600 kW generator, and add a combination crusher/screen. No other changes have been requested. NSPS Subparts A and OOO, and Title V of the 1990 Clean Air Act apply to this source. The emissions, in tons per year, will change as follows: PM₁₀ (+) 0.21, NO_x (+) 6.65, SO₂ (-) 1.19, CO (+) 3.60, VOC (-) 1.11, and HAPs (+) 0.00. The changes in emissions will result in the following, in tons per year, potential to emit totals: PM₁₀ = 17.15, NO_x = 34.59, SO₂ = 1.32, CO = 18.74, VOC = 2.30, and HAPs = 0.03.

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Tooele Transcript on March 12, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

TM Crushing, LLC
P.O. Box 437
Lehi, UT 84043

Permitted Location:

Grantsville Sand & Gravel Pit
5 miles south of Grantsville
Tooele County, UT 84029

UTM coordinates: 374,257.54 m Easting, 4,485,427.65 m Northing

SIC code: 1429 (Stone, Crushed & Broken, NEC)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
- I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

- II.A.1 **Grantsville Pit**
Plantwide
- II.A.2 One (1) 450 tons per hour (tph) jaw crusher
- II.A.3 One (1) 250 tph cone crusher
- II.A.4 One (1) 350 tph impact crusher
- II.A.5 One (1) 300 tph combination crusher/screen - new equipment
- II.A.6 One 450 tph triple deck screen
- II.A.7 One (1) 450 tph screen plant
- II.A.8 Associated conveyors, stackers, etc. (20 maximum transfer points)
- II.A.9 One (1) diesel generator rated at 600 kW - new equipment
- II.A.10 One (1) diesel generator rated at 700 kW
- II.A.11 Associated off-highway mobile equipment

II.B Requirements and Limitations

- II.B.1 TM Crushing shall notify the Executive Secretary in writing when the installation of the new equipment listed in Section II.A has been completed and is operational. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within 18 months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO. [R307-401-18]

- II.B.2 Visible emissions associated with the operations of the source shall not exceed 20% except where indicated otherwise. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401]

- II.B.3 The following production limits shall not be exceeded:

- A. 450,000 tons of aggregate processed per rolling 12-month period
- B. 3,750 hours of operation on each of the diesel generators per rolling 12-month period
- C. Plant operations shall not exceed 12 hours per day and shall only be conducted between 6:00 AM and 10:00 PM.
- D. Crushing and screening operations shall be limited to 450 tons per hour.

To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by the belt scale records near the initial feeder. The records of production shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401-1]

II.B.4 Conditions on Road and Fugitive Dust Emission Sources

- II.B.4.a Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity at any point. Visible emission determinations shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-401-1]
- II.B.4.b TM Crushing shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources. [R307-205]

II.B.4.c Open Area Limitations

- A. The area occupied by the storage piles generated by this operation shall not exceed 2.0 acres.
- B. The area disturbed by this operation, which has not been stabilized to prevent wind erosion, shall not exceed 48 acres.
- C. Control of disturbed or stripped areas shall be required at all times for the duration of the project/operation. [R307-401]

II.B.5 **Conditions on the Crushers, the Screens, and the Conveyors**

II.B.5.a Visible emissions from the following emission points shall not exceed the following values:

- A. All crushers - 15% opacity
- B. All screens - 10% opacity
- C. All conveyor transfer points - 10% opacity
- D. Conveyor drop points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For equipment subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

The new combination crusher/screen shall be subject to initial visible emission observations. Initial visible emission observations shall consist of 30 observations of six minutes each in accordance with 40 CFR 60.11(b). Equipment subject to NSPS Subpart OOO shall comply with 40 CFR 60.675(3) or 40 CFR 60.675(4). All visible emission observations must be conducted in accordance with 40 CFR 60, Appendix A, Method 9. A certified observer must be used for these observations. [40 CFR 60 Subpart OOO]

II.B.6 **Conditions on the Diesel Generators**

II.B.6.a The owner/operator shall use #1 and/or #2 fuel oil as fuel in the generators. [R307-401]

II.B.6.b The sulfur content of the fuel oil shall not exceed 0.50 percent by weight for fuels used in the generators.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of the fuel oil shall be either by TM Crushing's own testing or test reports from the used oil fuel marketer. [R307-401]

- II.B.6.c Visible emissions from the diesel generators shall not exceed 20% opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NSPS (Part 60), OOO: Nonmetallic Mineral Processing Plants

PERMIT HISTORY

The final AO will be based on the following documents:

Is Derived From
Supersedes

The NOI dated December 30, 2008
The AO (DAQE-AN0140830001-08) dated March 3, 2008

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds